

SACRAMENTO-SAN JOAQUIN DELTA ISLANDS & LEVEES, CA
CALFED LEVEE SYSTEM INTEGRITY PROGRAM
REQUEST FOR PROPOSALS
FOR DEVELOPMNT OF POTENTIAL INITIAL PROJECTS

PROJECT SUMMARY INFORMATION SHEET

Submitting Agency:

Reclamation District 501 – Ryer Island

Project Name:

Levee Seismic Upgrades

Purpose of Project:

Improve dynamic stability of District's levee system

Location of Project:

Reclamation District 501 – Ryer Island, Solano County

Problems Addressed By Project:

Improve Factor of Safety and levee performance against levee under seepage and seismic impacts.

Opportunities:

To Reduce Flood Damages:

Reclamation District No. 501 – Ryer Island (RD 501) operates and maintains approximately 20.8 miles of Project levees along Cache Slough (Sacramento Deep Water Ship Channel), Miner Slough, and Steamboat Slough which protect 11,880 acres of agricultural, residential, commercial and recreational land. This proposed levee improvement project would add additional Factor of Safety in those areas more susceptible to instability due to deep sand deposits and improve RD 501 levees to current design criteria set forth by the US Army Corps of Engineers for levee under seepage.

Protect Water Supply/conveyance:

RD 501's levees provide a conduit for Sacramento River water that provides freshwater flow to maintain water quality by limiting salt intrusion downstream of the District. The District's Western levee is adjacent to the Sacramento Deep Water Ship Channel and the Southern area of the Yolo Bypass.

Ecosystem Restoration:

N/A

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Project Description:

RD 501 plans on undertaking an extensive subsurface geotechnical investigation along its levee system in order to target areas that would benefit from the proposed seismic and seepage upgrades. It is anticipated that the geotechnical analysis would focus the District's project in areas of known deep sand deposits and existing seepage sites.

Project Scope:

The project would involve various sites around the entire island (see attached map provided by District)

Estimated Lineal Feet: 21,120

Project Costs:

Seismic Upgrade/Cut-off Wall	\$19 to \$28.5 million
Engineering, Design, & Construction	\$1.9 to \$2.85 million

Willingness & Ability to Cost Share

At this time, RD 501 has limited ability to Cost Share in a Federal Project. This is a critical matter, and needs to be resolved prior to RD 501 committing to cost share. In the past, other Districts have provided land, easements and/or right of ways, while the State of California has picked up the balance of the cost share. In order for the RD 501 to consider cost sharing in this project, other responsible agencies will also need to be identified and commit to cost sharing.

Point of Contact & Agency Affiliation

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Scoping & Screening Information

Project urgency

RD 501 provides flood protection for 11,880 acres of irrigated row crop, orchard and vineyards valued in excess of \$45,000,000. In addition to protecting valuable property, the District's flood control system also protects State Highway 84 and various county roads. Other facilities protected by RD 501 flood control levees include several recreation and resort facilities, ferry landings, and utilities. As Project levees, RD 501 levees are a component of the Sacramento Flood Control System and are located adjacent to the south end of the Yolo Bypass.

Anticipated changes in magnitude, frequency or duration of flood flows:

Not Applicable.

How does project address flooding, ecosystem, water supply & quality?

See Answers in text above.

Who or what will benefit from the potential project?

See Answers in text above.

What is the likely federal, state & local agency support?

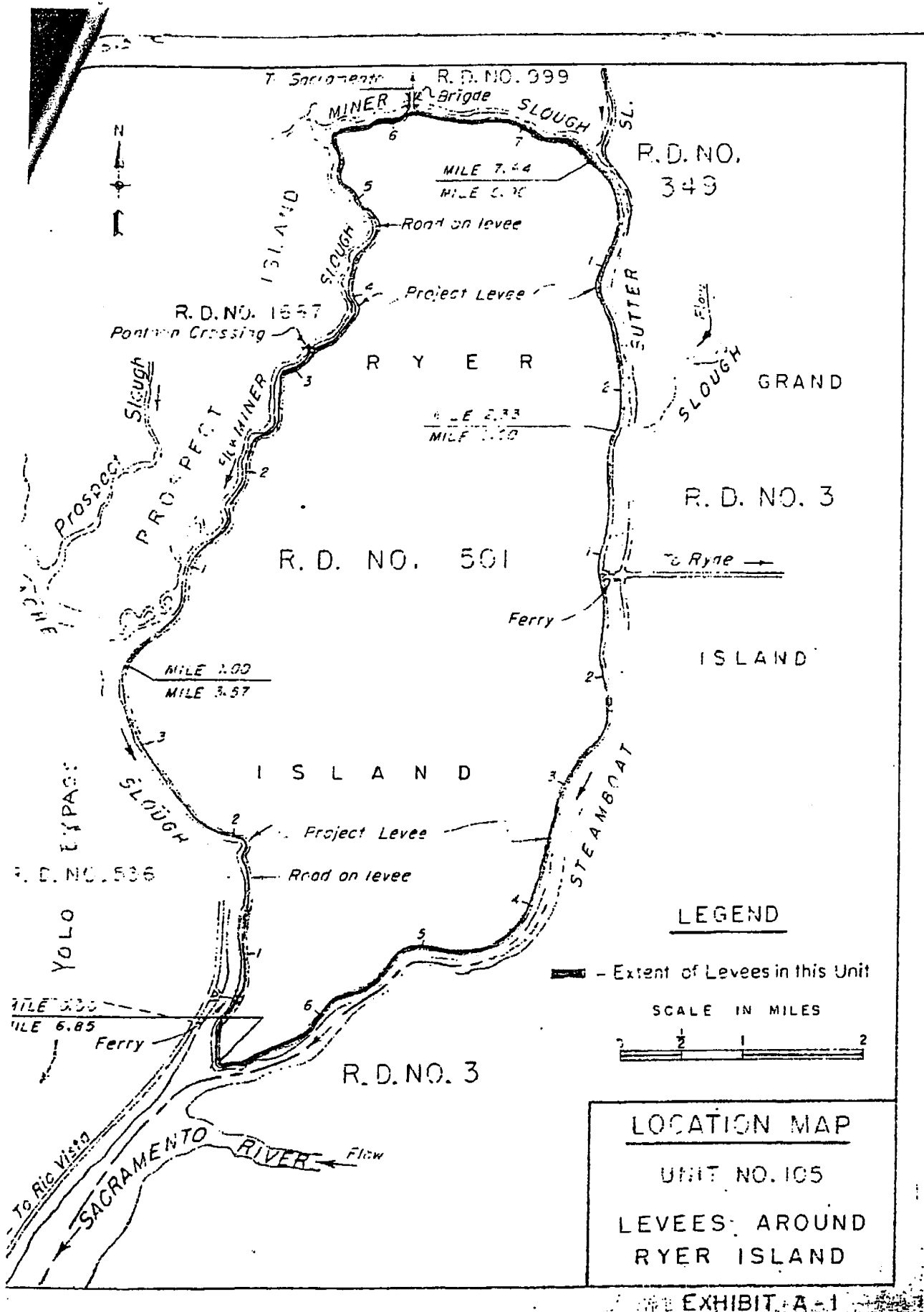
See paragraph above regarding "Willingness & Ability to Cost Share."

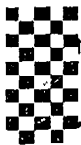
Are there obstacles that may delay development and implementation of project?

Available Cost Sharing.

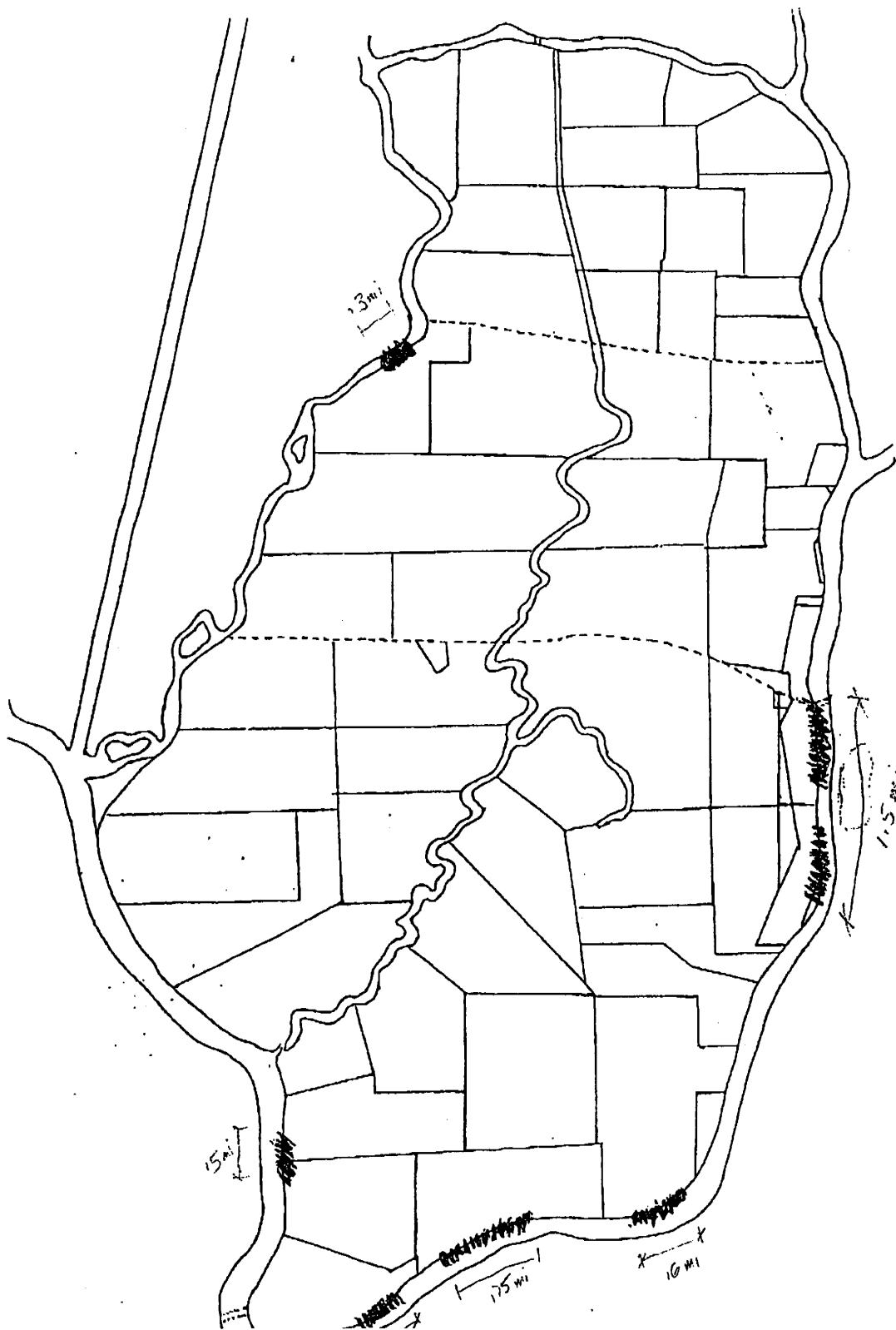
Is your agency ready, willing and able to serve as non-federal sponsor?

See paragraph above regarding "Willingness & Ability to Cost Share."





Ryer Island seepage 2006



1.5
1.6
1.75
1.5
1.3

3.65 miles
SAT 4 miles
OR
21,20 Linear Ft.